

TT-62-28592

Venstrem, E.K. and Rehbinder, P.A.
ELEVATION DE LA DEFORMABILITE A L'ETIREMENT
DES METAUX PAR EFFET ELECTROCAPILLAIRE
(Elektrokapillarnyi Effekt Oblegcheniya Deformatsii
Rastyazheniya Metallov) (The Electrocapillary Effect
of Promoting the Extension Deformation of Metals).
20p. (foreign tax included) 15 refs. CNRS-XVII 607.
Order from O/S ETC or CNRS \$0.80 TT-62-28592

Trans. in French of Zhurnal Fizicheskoi Khimii (USSR)
1952, v.26, no.12, p.1637-1653.

DESCRIPTORS: Metals, *Deformation, Electrical
double layer, Electric potential, Electrolytes,
Crystals, *Tin, *Lead.

(Metallurgy--Structural, TT, v. 11, no. 8)

I. Venstrem, E.K.
II. Rehbinder, P.A.
III. CNRS-XVII 607
IV. Centre National de la Recherche Scientifique, Paris

Office of Technical Services
European Translations Centre

S-5125

(NY-2538)

Ideal Types of Equilibrium Diagrams for Liquid
and Crystalline Phases, by V. M. Kravchenko,
28 pp.

RUESIAN, per, Zhur Kiz Khim, Vol XXVII, No 1,
1953, pp 6-25.

JPRS L-778-N

USSR
Sci - Chem
May 59

88, 123

Crystalline Structure of Thiocyanates: (8)
Crystalline Structure of Radium Hexathiocyanates,
by Z. V. Zvonkova.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, No 1.
1953, pp 100-105.

OTS 60-23623
DSIR LNU HTS 1431

Sci - Chem

Aug 60

122,515

The Crystalline Structure of Thiocyanates: (9)
X-Ray Examination of Crystalline Structures of
Complex Chromium Nickel and Platinum Hexathiocya-
nates, by G. S. Zhdanov, et al.

RUSSIAN, per, ~~Chem. Abstr.~~, Vol. XXVII, No. 1,
1953, pp 106-110.

SLA 60-23674
DSIR LRU RPS 1429

Sci - Chem

Aug 60

122,508

The Kinetics of Transformation of the Polymorphous
Modifications of Ammonium Nitrate. 4. The
Transformation of $\text{NH}_4\text{NO}_3(\text{III}) \rightleftharpoons \text{NH}_4\text{NO}_3(\text{II})$,
by B. V. Erofeev, H. I. Mitskevich, 9 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXVII, No 1,
1951, pp 118-124.

Sci Mus Lib No 56/1978

Sci - Physics

42,267

ne Reduction Magnetization of Iron Oxide Ores,
V. A. Roiter, et al.

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RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, No 1,
1953, pp 125-129.

DSIR LLU M.1821
(loan)

Sci - Chem

Oct 60

128,908

On the Low Intensity Bands in the Ultra-Violet
Absorption Spectrum of Benzene, by P. F. Chesko,
4 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, No 2,
1953, pp 157, 158.

Sci Tr Center
RT - 3742

Sci - Chemistry

Aug 1956

37,73

On the Theory of Activated Adsorption, Parts
I and II, by F. F. Volkenstein,

RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, No 2,
1953, pp 159-177.

CEA TR R-1651 Rev Tr
Sci Mus Sub 56/3998

20,035

Coop Tr Sch No 99
[Lb. 4.1 Sc. (195.04.)]

Scientific - Physics

Dec 1954 CTS

Contribution to the Theory of Crystal Lattices of
the NaCl Type, by V. A. Zhdanov, R. P. Mar'yasova,
13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, No 2, 1953,
pp 210-216.

Sci Mus Lib Tr 56/1796

Sci - Chemistry

40,641

Rule of Order for Nonlinear XY₂ Molecules, by
V. P. Morozov, 9 pp.

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1953, pp 233-243.

Sci Tr Center
RR-4054

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Sci - Chemistry
Oct 1956 GWS/len:

Distribution of Direct-Current Electrical Field in
Electrolyzers: Graphical Method of Field
Construction, by G. V. Forsblom, 25 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, No 3, 1953,
pp 321-329.

26,706
GTS TT-64-14144

Sci Trans Center
RT-2286

Scientific - Electricity (Electro-Chemistry)

Sep 55 GTS/DEX

The Dependence of a Band Intensity of Combination
Light Scatter of Benzene Derivatives on the
Structural Peculiarities of Molecules, by
A. Kh. Khalilov, P. P. Shoruga, 18 pp,

RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, No 3,
1953, pp 330-340.

23/3/3

Sci Mu Lib No 54/3484
Nat Res Lib No 486

TT

Scientific - Physics

May 55, CTS

Mechanism of Oxidation of Hydrocarbons in Gaseous Phase. I. Chemism of Cold-flame and High-temperature Oxidation of Propylene, by S. S. Polyak, V. YA. Shtern, 26 pp.

RUSSIAN, per, Zhur.Fiz.Khim., Vol XXVII, No 3, 1953, pp 341-354.

Sci Tr Center RT-2409

USSR
Scientific - Chemistry

28,252

Nov 55
CTS/DEX

Sensitization of the Photoconductivity of Silver Iodine
by Organic Dyes, by A. G. Gol'dman, I. A. Akimov,
7 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, No 3,
1953, pp 355-361.

ATS-05Q72R

Sci-Chem
March 64

252,073

Kinetics of Oxygen Ionization, by
A. I. Krasilvchikov, et al, 8 pp.
RUSSIAN, per, Zhur Fizicheskoi Khimii,
Vol XXVII, No 3, 1953, pp 385-393. 97-00772
Dept of Navy Tr 4618/ONI Tr 2150

Sci- Phys
May 66

299,8716

Study of the Electrodeposition (Electrocrystallization)
of Metals in an Ultrasonic Field, by S. M. Kochergin
and N. N. Terpilovskiy, UNCLASSIFIED

RUSSIAN, per, Zhur Fiz Khim, vol XXVII, No 3, 1953,
pp 394-398.

Brutcher Tr 3267

Scientific - Minerals/Metals

11,954

Price \$3.90

Directed Valences With Shared f -Electrons, by M. G.
Shirnazan, M. E. Dyatkina, 4 pp. UNCLASSIFIED

RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, 1953,
pp 491-494.

ABC Tr 1956

PT-1986

Scientific - Physics

18,687

Contribution to the Theory of Surface Tension of
Metals, by S. N. Zadumkin

RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, No 4, 1953,
pp 502-504.

Brutcher Tr 3172

61-17307

Scientific - Minerals/Metals
GSS/lex

Price \$2.50

7857

Low Temperature Investigations of the Structure
of Aromatic Compounds. I. Anisotropy of the
Thermal Expansion of Naphthalene, by V. M. Kozhin,
A. I. Kitaygorodskiy.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXVII, No 4,
1953, pp 534-541.

~~Revised~~
Natl Res Lib
TT-527

29,212

Scientific - Chemistry
CTS 75/Dec 55

Polarography and Thermodynamics. II. Solubility
and Thermodynamical Properties of Barium
Selenate, by N. M. Selivanova, A. F. Kapustinskiy,
11 pp.
RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, 1953,
pp 565-571. 9223559
AEC-ANL-Tr-23

Sci-Phys
Sep 64

265,833

Adiabatic Calorimeter for Measuring Heat Capacity of
Solutions Investigation of Salts of CO HBe ,
and Mg , by A. F. Kapustinskiy, B. M. Yakushevskiy,
S. I. Drakin, 10 pp.

RUSSIAN, per, Zhur Fiz Khim. Vol XXVII, 1953,
pp 588-595.

SLA R 2831

Sci

Jul 59

92, 406

Mechanism of the Oxidation of Hydrocarbons in the Gaseous Phase. Part II. Degenerate and Branching Character of the Oxidation of Propylene, by S. S. Polyak, V. Ya. Shtern, 14 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, No 5, 1953, pp 631-639.

A Sci Tr Center
RT-2285

28,941

Scientific - Chemistry Nov 55 CTS/DEX

A Study of the Kinetics and Mechanism of the
Polymerization of Vinyl Acetate, by M. V.
B Polyakov, et al, 13 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXV, Th1953,
pp 647-653.

SIA Tr R-109

Sol - Chem
Apr 1957

Jan 1957
46,217

Kuznetsov, A. Ya.
ON THE PROBLEM OF SURFACE ELECTRICAL
CONDUCTIVITY OF GLASSES IN HUMID ATMOS-
PHERE (K Voprosu o Poverkhnostnoy Elektroprovod-
nosti Stekol vo Vlazhnoy Atmosfere). Apr 61 [8 p.
7 refs. RTS-1835]

Order from OTS or SLA \$1.10

61-19948

Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1953,
v. 27, no. 5, p. 657-661.

DESCRIPTORS: *Conductivity, Electrical properties,
*Glass, Hydrolysis, *Humidity, Atmosphere, Films,
Silicates

(Chemistry-Physical, TT, v. 6, no. 2)

61-19948

- I. Kuznetsov, A. Ya.
- II. RTS-1835
- III. Department of Scientific
and Industrial Research
(Gr. Brit.)

169860

Office of Technical Services

(FDD 25309)

Kinetics of the Reaction of Calcium With Nitrogen,
by V. A. Shashunov, Yu. N. Baryshnikov, 20 pp.

RUSSIAN, no par, Zhur Fiz Khim, Vol XXVII, No 5,
Moscow, 1953, pp 703-712

CIA/FDD/U-7194

USSR
Sci - Chemistry, physical

29,677

Heterodynamism of Silicate Glasses by Tarasov and
Sovitskaya.

RUSSIAN, per Zhurnal Fizicheskoi Khimii, Vol XXVII,
1953, pp 744-752.

CSIRO

Oct. 62

Shushunov, V. A. and Baryshnikov, Yu. N.
KINETICS OF REACTION OF Na+Pb AND K+Na+Pb
ALLOYS WITH ETHYL CHLORIDE VAPORS. [1963]
23p (figs omitted) 6x9 1/2
Order from OTS, SLA, or ETC \$2.60 TT-64-14698
Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1953,
v. 27, no. 6, p. 830-839.

(Chemistry--Physical, TT, v. 11, no. 11)

TT-64-14698

I. Shushunov, V. A.
II. Baryshnikov, Yu. N.

Office of Technical Services

Investigation of the Mechanism of Ripening of
Photographic Emulsions II. The Interralation
Between Light Sensitivity, Fog Growth and the
Formation of Silver During Ripening, by A. A.
Milyayev, I. M. Ratner, A. A. Titov, K. V.
Chibrikov, 22 pp.

RUSSIAN, ind per, Zhur Fiz Khim, Vol XXVIII,
No 6, 1953, pp 866-877.

CIA/FDD X-2210

Sci - Physics
Nov 1956 CTS/act

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(FDD 19467)

Some Questions Concerning the Theory of Chain Reactions, by N. N. Semenov, 89 pp.

RUSSIAN, No. 6, Zhur Fiz Khim, Vol XXVII, No 6, Moscow/Leningrad, Jun 1953, pp 889-918

CIA/FDD/U-5697

USSR
Sci - Chem

12,505

APR 54 CTS

Electrical Properties of Solid Solutions in the ZrO_2 -
 MgO and ZrO_2 - CaO Systems, by A. M. Avgustinik, E. S.
Antselevich, UNCLASSIFIED.

RUSSIAN

~~English~~, par, Zhur Fiz Khim, Vol XXVII, No 7, 1953,
pp 973-982.

Brutcher Tr Ho 3367

Scientific - K Min/Metals

17,373

and

Heat Capacities of Individual Ions in Aqueous Solutions at Infinite Dilution, by K. P. ~~M~~ushchenko and A. M. Ponomareva, 12 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVI, 1953, pp 998-1006.

SLA R-2777

Sci

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Aug 58

Kinetics and Mechanism of Propane Decomposition
in the Presence of Isobutylene and Propylene as
Inhibitors, by A. D. Stepukhovich, E. S. Shver,

RUSSIAN, no per, Zhur Fiz Khim, Vol XXVII, No 7,
1953, pp 1013-1024.

Natl Res Lib TT. 520

Scientific - Chemistry
Dec 55 CTS/DEX

Sci Mus Lib
29, 466
58/205

The Relation Between the Condition of the Crystal
lattice of a Catalyst and Its Activity, by P. F.
Ipatov, 8 pp.

RUSSIAN, no per; Zhur Fiz Khim, Vol XXVII, No 8,
1953, pp 1133-1136.

Sci Tr Ctr RT-3487

Scientific - Chemistry

34, 264.

May 56 CTS/dex

Rozental, K. I. and Veselovskii, V. I.
STUDY OF THE MECHANISM AND THE KINETICS
OF THE REACTION OF ELECTROCHEMICAL
OXIDATION BY THE METHOD OF ANODIC POLAR-
OGRAPHY ON THE PLATINUM ELECTRODE. [1962]
13p. (11 figs. omitted) 10 refs.
Order from OTS or SLA \$1.60

62-16539

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1953,
v. 27, no. 8, p. 1165-1171.

DESCRIPTORS: *Electrochemistry, *Platinum
electrodes, Oxidation, *Polarographic analysis,
Reaction kinetics

There is developed a new method for taking anodic
polarograms on the rotating platinum microelectrode
which enables its employment for analytical purposes
and for studying the mechanism of complicated
(Chemistry: Physical, TT, v. 3, no. 10) (over)

62-16539

I. Rozental, K. I.
II. Veselovskii, V. I.

Office of Technical Services

The Effect of the Calcining Temperature on the Amount
of Surface and Water Content of Aluminium and Magnesium
Oxides, by G. K. Borekov, V. A. Dzis'ko, M. S. Borisov
8 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXVII, No 8, 1953,
pp 1176-1180.

36,097
Sci Tr Center RT-3657

Scientific - Chemistry

Jun 56/dex

An Investigation of the Mechanical Properties of
Crystalline Polymers. II. Polyethylenes, by V.A.
Kargin, T. I. Sogolova, 15 pp.

RUSSIAN, Ser, Zhur Fiz Khim, Vol XXVII, No 8, 1953,
pp1208-1212

SLA R-2775

Sci

Jul 59

92,362

The Investigation of the Mechanical Properties
of Crystalline Polymers. III. Copolymers of
Vinyl Chloride with Vinylidene Chloride and
Gutta-Percha, by V. A. Kargin, T. I. Sogolova.

RUSSEIAN, no per, Zhur Fiz Khim, Vol XXVII, No 3,
1953, pp 1213-1216.

T.I.L. T. 4525

Sci - Chemistry, *Rubric* 35, 716

Jun 1956

Electronic Investigation of Crystalline Polymers.
I. Linear Polymers, by V. A. Kargin, G. S.
Markova.

RUSSIAN, no per, Zhur Fiz, Khim, Vol XXVII, No 8,
1953, 1236-1240.

T.I.L. T. 4526

Sci - Chemistry

Jun 1956

35,711

Sci. no. 2 (1953) 1236-1240
Co. 1953

Thermodynamic Criteria for Kinetic Equations of
Electrochemical Reactions, by S. V. Gorbachev.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, No 9, 1953,
pp 1362-1369.

Def Sci Info Sv
DRB T.157.R.

Scientific - Physics

Feb 55 CTS/DEX

21,184

Investigation of Cathode Processes in the
Electrodeposition of Copper from Complex
Electrolytes, by E. A. Ukshe, A. N. Levin.

RUSSIAN, per, Zhur Fiz khim, Vol. XXVII,
1958, pp 1398-1403.

Consultants Customs Tr
SEP-2018
\$12.00

Sci - Chem, Electron

Mar 59

83,476

The Question of Three Auto-Ignition Limits in Fuel
Mixtures, 12 pp, 1 illus.

RUSSIAN, per, Zhur Fiz Khim, ^{Vol XXVII} ~~Vol XXVII~~, No 9, 1953,
pp 1420-1425
Encl to IR-1183-57.

AID/Feb 57

USSR
Physics

50,384

On New Experimental Confirmations of Our Theory of
Heat Capacity of Chain and Stratified Structures,
by B. B. Tarasov.

RUSSIAN, per, Zhur Fiz Khim, No 9, 1953, pp 1430-1436

NLL(LOAN)Ref: 5828.4 1963 (5443)

Sci-Chem
April 64

Measurement of Small Vapor Pressures at Elevated Temperatures. IV. The Partial Vapor Pressures of the Components in the System Ag — Pb, by A. A. Granovskaya, A. P. Lyusimov, 9 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXVII, 1953, pp 1437-1442.

AEC Tr 2495

AEC-Tr-6003 (9215562)

Sci - Chemistry

Jul 1954

36,576
7DD/X-2118

The measurement of Small Vapour Pressures at High
Temperatures. V. Partial Vapour Pressure of the
Components in the Iron/Phosphorous System, by
A. A. Granovskaya, A. P. Luibimov, 4 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, No 10,
1953, pp 1443-1445.

Sci Mus Lib .. 56/0287

Sci - Chemistry, Minerals/Metals,

May 1956

33,792

CIA F-2D X-2121

Some Rules for Plotting Phase & Diagrams of
Binary Systems, by S. D. Gromakov, L. M.
Gromakova, 15 pp.

RUSSIAN, Per, Zhur Fiz Khim, Vol XXVII, 1953,
pp 1545-1555.

ABC 4tr-4289

Sci - Chem, Phys
21 Feb 61

140.947

Investigation of the Inflammability Conditions
of Gas Mixtures. Part XXIII. Oxidation of Ethane,
by M. I. Gerber, M. B. Neiman.

RUSSIAN, no per, Zhur Fiz Khim, SSSR, Vol XXVII,
No 10, 1953, pp 1572-1579.

*Navy Tr /NRL

Scientific - Physics

Transfer and Distribution of Metal Alloy^s in an
Electric Field, by S. I. Drakin, 12 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, No 10,
Moscow, Oct 1953, pp 1586-1591.

US JPRS/NY-L- 82

Sci - Physics
May 58

63,105

Investigation of Conditions of Inflammability
of Gas Mixtures. Part XXIV. Cold Flame Oxidation
of Propane, by M. I. Gerber, M. B. Neyman (Neuman),
5 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXVII, No 11,
USSR, 1953, pp 1617-1621.

Navy Tr 1227/NRI, 529

Scientific - ~~EXCLUDED~~
Physics

CTB 73/Oct 55

28,103

Investigation of Conditions of Inflammability of
Gas Mixtures, Part XXV. Investigation of the
Cold Flame Oxidation of Butene, by A. A.
Dobrinskaya, M. B. Neyman (Neuman), N. K.
Rudnevskiy, 9 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXVII, No 11,
USSR, 1953, pp 1622-1630.

Navy Tr 1228/MRI 530

Scientific - Physics
CIB 73/Oct 55

28, 104

The Thermochemical Properties of Ions in Aqueous
Solution, by S. I. Drakin, B. N. Yakushevskiy. 9 pp
UNCLASSIFIED.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, 1953,
pp 1636-1641,

RT 2131
AEC Tr 1917

Scientific - Chemistry

15,137

Low Temperature Studies of the Structure of
Aromatic Compounds. 2. An Isotropic Thermal
Expansion of Anthracene, by V. M. Kozhin,
A. I. Kitaygorodskiy, 10 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol. XXVII, No 11,
1953, pp 1678-1681.

Sci Mus Lib - 56/0194

Natl Res Lib - TT-566

Sci - Physics, Chemistry

33,791

May 1956

Adhesion of Electrolytic Zinc Deposits to Iron, by
K. M. Gorbunova, P. D. Dankov, 2100 words.

RUSSIAN, per, Zhur Fiz Khim, Vol XXVII, No 11, 1953,
pp 1725-1730.

Butcher No 3549
\$4.20

Scientific -- Minerals/metals

26,721

Sep 55

Stepukhovich, A. D. and Tschalkin, A. M.
KINETICS AND MECHANISM OF HYDROCARBON
DECOMPOSITION. III. KINETICS AND MECHANISM
OF BUTANE AT LOW PRESSURES IN PRESENCE OF
ISOBUTYLENE AND PROPYLENE AS RETARDANTS.
[1962] 10p. (figs. tables formulae refs. omitted).
Order from OIS or SIA \$1.10 62-20340

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1953,
v. 27, no. 12, p. 1737-1747.

DESCRIPTORS: *Hydrocarbons, Decomposition,
*Butanes, *Propenes, Reaction kinetics, Chemical
reactions, Inhibition.

See also 62-14856.

(Chemistry--Organic, TT, v. 9, no. 12)

62-20340

I. Stepukhovich, A. D.
II. Tschalkin, A. M.
III. Title: Kinetics...

Office of Technical Services

Reducing Action of Hydrogen and Carbon
Monoxide upon Iron Oxides at Low Temperatures,
by A. N. Gurnetsov,

RUSSIAN, *Izvestiya Akad. Nauk SSSR, Zhur Fiz Khim*, Vol XXVII, No 12,
1953, pp 1808-1815.

Brutcher Tr No 3300

13,729 ~~13,729~~

Scientific - ~~Reference~~

chemistry

Separation of Hydrocarbon Mixtures by the
Chromathermographic Method, by N. M. Turkel'taub.

RUSSIAN, no per, Zhur Fiz Khim, Vol XXVII,
1953, pp 1827-1836.

Assoc Tech Sv RJ-223
\$18.00

Scientific - Chemistry
CTS 73/Oct 1955

27,490

61-19600

Gorbashev, S. V. and Mindovich, Ye. Ya.
ETUDE DES EQUILIBRES DE PARTAGE DE L'ACIDE
PICRIQUE ENTRE L'EAU ET LE NITROBENZENE. I.
tr. by M. Vinogradoff. 13 Dec 60 [11]p. 3 refs. CEA
Trans. no. R 1106.
Order from OTS or SLA \$1.60

61-19600

Trans. in French of Zhurnal Fizicheskoy Khimii
(USSR) 1955, v. 27, p. 1837-1841.

DESCRIPTORS: *Chemical equilibrium, *Picric acid,
*Water, *Nitrobenzenes, Benzenes

- I. Gorbashev, S. V.
- II. Mindovich, Ye. Ya.
- III. CEA-tr-R1106
- IV. Commissariat à l'Énergie
Atomique (France)

175281

Office of Technical Services

(Chemistry--Physical, TT, v. 6, no. 3)

61-23754

Gorbachev, S. V. and Mindovich, E. Ya.
ETUDE DES EQUILIBRES DE PARTAGE DE L'ACIDE
PICRIQUE ENTRE L'EAU ET LE NITROBENZENE,
II [Study of the Equilibria of Distribution of Picric
Acid Between Water and Nitrobenzene] tr. by
M. Vinogradoff. 27 Oct 59 [9]p. 3 refs. no. R 751
(text in French).

Order from CTS or SLA \$1.10

61-23754

Trans. In French of Zhurnal Fizicheskoi Khimii
(USSR) 1953, v. 27, no. 12, p. 1842-1847.

DESCRIPTORS: "Chemical equilibrium, *Picric acid,
*Water, *Nitrobenzenes, Benzenes.

See also 61-19600

(Chemistry--Physical, TT, v. 6, no. 7)

- I. Gorbachev, S. V.
- II. Mindovich, E. Ya.
- III. CEA-tr-R751
- IV. Commissariat à
l'Energie Atomique
(France)

Office of Technical Services

TT-64-1441

Dellmar'ski, Yu. K., Markov, B. P., and
Berenblyum, I. S.DETERMINATION OF COEFFICIENTS OF DIFFUSION
OF IONS IN MOLTEN SALTS. [1953] [15p] (figs
omitted) 8 refs

Order from CTS, SLA, or ETC \$1.50 TT-64-1441

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1953,
v. 27, no. 12, p. 1848-1855. (Abstract available)DESCRIPTORS: *Electrochemistry, *Fused materials,
Salts, Ions, *Silver, Diffusion, Potassium compounds,
Sodium compounds, Lithium compounds, Chlorides,
Nitrates.A method for determining the coefficients of diffusion of
ions in molten salts, based on measuring the decrease
in current with time on a plane-end electrode, is
proposed. Up to a certain time after the instant of con-
(Chemistry-Physical, TT, v. 11, no. 11) (over)I. Dellmar'ski, Yu. K.,
II. Markov, B. P.,
III. Berenblyum, I. S.

Office of Technical Services

A Method for the Analysis of Microscopic
Quantities of Heavy Water, by R. E. Mardaleishvili,
et al. UNCL

RUSSIAN, per, Zhuk-Fiz Khim, Vol XXVII, No 12,
1953, pp 2195-2198.

CGF-827B

Sci - Chem
Sep 59

96,641

Electrical Properties of Films of Condensed
Aromatic Hydrocarbons on Aqueous Solutions
of Inorganic Salts, by N. A. Gerovich, O. G.
Ol'man.

RUSSIAN, per, Zhur Fiz Khim, Vol 28, No 1,
1954, pp 19-25.

*ABC

Sci - Chemistry
May 67

Yatsimirskii, K. B. and Shutov, A. A.
THE THERMOCHEMISTRY OF SOME IODIDE COM-
PLEXES. 10p. 6 refs. MTWL: 749.
Order from CTS or ETC \$1.55

61-17269

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1954,
v. 28, no. 1, p. 30-35.

DESCRIPTORS: *Iodides, Complex compounds,
*Thermochemistry, Chemical equilibrium.

61-17269

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CFST I # 65-6 0347

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ELECTRICAL CONDUCTIVITY OF THE BINARY
SYSTEMS: CADMIUM NITRATE-POTASSIUM NITRATE
CADMIUM NITRATE-RUBIDIUM NITRATE AND
CADMIUM NITRATE-SILVER NITRATE IN FUSIONS
[Elektroprovodnost' Binarnykh Sistem: Nitrat Kadmiya-
Nitrat Kaliya, Nitrat Kadmiya-Nitrat Rubidiya i Nitrat
Kadmiya-Nitrat Serebra v Rasplavakh]. [1963] [15p]
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Another trans. is available from SLA as RT-2571, 17p.

DESCRIPTORS: *Fused materials, Salts, *Cadmium
compounds, *Potassium compounds, *Rubidium com-
pounds, *Silver compounds, *Nitrates, Electrical
conductivity.

(Chemistry-Physical, TT, v. 11, no. 10) (over)

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Measurements of the Heat Capacity of Solid Bodies
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Mirskeya, B. M. Samoilov, 21 pp.

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AEC Tr 3266

Sci - Chem

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Kalish, T. V. and Frumkin, A. N.

THE EFFECT OF THE ADSORPTION OF ANIONS ON
THE REDUCTION OF THE $S_2O_8^{2-}$ ION AT A DROP-
PING CATHODE (Vliyanie Adsorpsii Anionov na
Vosstanovleniye Ionn $S_2O_8^{2-}$ na Kapel'nom Katode).
Apr 61 [24] p. 31 refs. RTS 1747.
Order from OLS or SLA \$2.60

61-19802

Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1954,
v. 28, no. 3, p. 475-469.

DESCRIPTORS: Ions, Reduction, *Electrolysis,
*Peroxydisulfates, Adsorption.

The electroreduction of $S_2O_8^{2-}$ ions at a mercury elec-
trode is retarded by adsorbing anions. The rate of this
reaction at a positively charged surface depending on
the nature of the indifferent electrolyte, follows the
order $Na_2SO_4 > KCl > KBr > KI$. In passing from
0.01 N Na_2SO_4 to 0.01 N KI , for this reaction, provided
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(Chemistry-Physical), TT, v. 6, no. 4) (over)

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Retarding Effect of Gaseous Reaction Products
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OTL 66-17322

TT-62-28283

Neiman, M.B.
MÉTHODE CINÉTIQUE D'APPLICATION DES ATOMES
MARQUÉS POUR L'ÉTUDE DU MÉCANISME DES
PROCESSUS CHIMIQUES ET BIOCHIMIQUES COM-
PLEXES. II. THÉORIE DE LA MÉTHODE (Kinetics-
Kii Metod Priimeneniya Mechenykh Atomov dlya Issle-
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Complex Chemical and Biochemical Processes.
1. Theory of the Method) 24p. (Foreign text included)
11 refs. CNRS-VIII bis 560.
Order from CTS, ETC or CNRS \$0.90 TT-62-28283

Trans. in French of Zhurnal Fizicheskoi, Khimii
(USSR) 1954, v. 28, no. 7, p. 1235-1242.
Another trans. is available in English from LC or SLA
ml\$2.40, ph\$3.30 as TT-61-10529 [1960] 14p.

DESCRIPTORS: Chemical reactions, Kinetic theory,
Radioactive isotopes, *Labeled substances, *Bio-
chemistry, Injection, Animals, Tracer studies,
(Biological Sciences--Biochemistry, TT, v. 11, no. 6)

- I. Neiman, M.B.
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Office of Technical Services
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S-84/60

(NY-3543)

The Effect of Molecular Structure on the Velocity of the Ionic and Atomic Reactions of Isotope Exchange. II. The Effect of Lengthening the Carbon Chain of the Alkyl Radical on the Rate of Isotope Exchange of an Alkyl Halide With Halide Ions, by M. B. Neyman, Yu. M. Shapovalov, V. B. Miller, 28 pp

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JPRS 2652

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Sci Chem
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